Portable Fume Hood and its benefit

Lab equipment comes in many different configurations to meet the variety of substances and methods that various labs use in. Generally, lab equipment supplier provide many type of lab equipments for different R&D applications such as Fume Hood, **Laminar Air Flow**, Pass Box and many more. It can be challenging to select the best equipment for your application due to its complexity. You can use this study to decide if a portable fume hood is the best option for your lab

What is a Portable Fume Hood?

Portable fume hood is also known as a re-circulating fume hood, because it filters the air in your lab and then circulates it. They are separate lab enclosures that work by continuously blowing air across the workspace and pulling it through a filter to remove pollutants, particles, and chemical odours. Portable fume hoods do not have connections to the building's HVAC system, in contrast to ducted fume hoods. They reuse the clean air inside your laboratory as opposed to venting it outdoors like ducted hoods do.

Uses for portable fume hoods

Light to medium workload labs that frequently use ten or less compounds, as well as chemicals in small amounts of 500 ml or less, benefit from the usage of portable fume hoods. They perform best in laboratories with knowledgeable and skilled lab staff as well as in those without access to outdoor venting. Employees shouldn't be exposed to contaminants for longer than two to three hours each day.

Advantages of portable fume hood

In contrast to ducted fume hoods, portable fume hoods can offer a variety of advantages.

Movable- The majority of ductless fume hoods are moveable, allowing for sharing between several projects at various times of the day or on various days of the week. Several portable fume hoods have wheels, making it simple to move them to the appropriate location and position when needed. When not in use, they may also be easily rolled away. Ducted fume hoods that are always attached to the building's HVAC system, are unable to be moved about.

Saving energy- Portable fume hood may use less energy than a ducted fume hood, which frequently operates continuously because it only consumes electricity while it is in use. Additionally, ducted fume hoods must move air farther, which uses energy.

Less costly- A portable fume hood's initial cost is generally less than that of a ducted device. Ducted units incur additional expenditures for connecting to the building's HVAC system on top of the purchasing price. Since they feature fewer motors and fan that normally only run when the machine is in use, portable/ductless fume hoods offer lower daily operating costs than ducted hoods.

Simple to install- Frequently, a portable fume hood can be used right away after delivery. Simply wheel it to the workstation, plug it in, and insert the proper filter. In contrast, ducted fume hoods need more intricate connections and could need for licences, permits, and approvals before they can be used for the first time. Portable fume hoods can be easily maintained by lab staff, however

ducted fume hoods may require training for building engineers to ensure correct maintenance and operation.

The limitations of portable fume hoods

Under certain circumstances, a portable fume hood might not be the ideal option. The hood will be ineffective if the substances in the lab can't be successfully eliminated by charcoal or other easily accessible filters.

They might not function properly in extremely hot environments or when exposed to a lot of chemicals. They are not a wise choice for labs staffed by inexperienced or student workers.

Additionally, a portable fume hood's filter needs to be replaced on a regular basis. It is necessary to rely on lab staff to complete this activity as needed, and the expense of repeated filter replacements may eventually outweigh the initially modest acquisition costs. With current filters, some substances cannot be efficiently regulated.

Should Your Lab Consider a Portable Fume Hood?

For your lab, a portable fume hood can be the best option. You should discuss your application with a professional **fume hood manufacturer** before continuing. An expert in fume hoods can evaluate your laboratory's needs and work with your budget to assist you chooses the best choice to protect the environment and your lab staff's safety.